

Please type a plus sign (+) inside this box → +

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 3

Complete if Known

Applicati n Number	10/057,826
Filing Date	January 24, 2002
First Named Invent r	Tucker, Charles E.
Group Art Unit	1621
Examiner Name	Unassigned
Attorney Docket Number	021153-001400US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<u>u</u>	AG	Cao, P., et al., "Ru-BICP-Catalyzed Asymmetric Hydrogenation of Aromatic Ketones," <u>J. Org. Chem.</u> , 64:2127-2129 (1999).	
	AH	Doucet, H, et al., "trans-[RuCl ₂ (phosphane) ₂ (1,2-diamine)] and Chiral trans-[RuCl ₂ (diphosphane)(1,2-dia-mine): Shelf-Stable Precatalysts for the Rapid, Productive, and Stereoselective Hydrogenation of Ketones," <u>Angew. Chem. Int. Ed.</u> , 37(12):1703-1707. (1998)	
	AI	Grey, et al., "Symposium on Homogeneous Catalysis Presented Before the Division of Petroleum Chemistry, Inc.," <u>Am. Chem Soc.</u> , "Novel Anionic Phosphine Transition Metal Hydride Complexes and their Application to the Catalytic Hydrogenation of Polar Organic Compounds," 399-403 (1980).	
	AJ	Hartmann, R., et al., "Noyori's Hydrogenation Catalyst Needs a Lewis acid Cocatalyst for High Activity," <u>Angew. Chem. Int. Ed.</u> , 40(19):3581-3585 (2001).	
	AK	Hashiguchi, S., et al., Asymmetric Transfer Hydrogenation of Aromatic Ketones Catalyzed by Chiral Ruthenium (II) Complexes," <u>J. Am. Soc.</u> , 117:7652-7563 (1995).	
	AL	Jiang, Y., et al., "A New Chiral Bis(oxazolinylmethyl)amine Ligand for Ru-Catalyzed Asymmetric Transfer Hydrogenation of Ketones," <u>J. Am. Chem. Soc.</u> , 120:3817-3818 (1998).	
	AM	Lauhon T., et al., "RNA Aptamers that Bind Flavin and Nicotinamide Redox Cofactors," <u>J. Am. Chem. Soc.</u> , 117(4):1246-1257 (1995).	
	AN	Matsumura, K., et al., "Asymmetric Transfer Hydrogenation of α , β -Acetylenic Ketones," <u>J. Am. Chem. Soc.</u> , 119:8738-8739 (1997).	
	AO	Mikami, K. et al., "Asymmetric Activation/Deactivation of Racemic Ru Catalysts for Highly Enantioselective Hydrogenation of Ketonic Substrates," <u>Angew. Chem. Int. Ed.</u> , 39(20):3707-3710 (2000).	
	AP	Noyori, R., et al., "Asymmetric Catalysis by Architectural and Functional Molecular Engineering: Practical Chemo- and Stereoselective Hydrogenation of Ketones," <u>Angew Chem. Int.</u> , 40:40-73 (2001).	
	AQ	Noyori, R., Asymmetric Hydrogenation," <u>Acta Chem. Scandinavia</u> , 50:380-390 (1996).	
	AR	Ohkuma, T., et al., "Asymmetric Activation of Racemic Ruthenium (II) Complexes for Enantioselective Hydrogenation," <u>J. Am. Chem. Soc.</u> , 120:1086-1087 (1998).	
	AS	Ohkuma, T., et al., Practical Enantioselective Hydrogenation of Aromatic Ketones," <u>J. Am. Chem. Soc.</u> , 117:2675-2676 (1995)	
	AT	Ohkuma T., et al., "Asymmetric Hydrogenation of Alkenyl, Cyclopropyl, and Aryl Ketones. RuCl ₂ (xylbinap)(1,2-diamine) as a Precatalyst Exhibiting a Wide Scope," <u>J. Am. Chem. Soc.</u> , 120:13529-13530 (1998).	
<u>u</u>	AU	Ohkuma, T., et al., "Asymmetric Hydrogenation of Cyclic α , β -Unsaturated Ketones to Chiral Allylic Alcohols," <u>SYNLETT</u> , 467-468 (1997).	

Examiner Signature

Ch

Date Considered

2/11/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.
WC 9040925 v1



Please type a plus sign (+) inside this box +

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3 of 3

Complete if Known

Application Number	10/057,826
Filing Date	January 24, 2002
First Named Inventor	Tucker, Charles E.
Group Art Unit	1621
Examiner Name	Unassigned
Attorney Docket Number	021153-001400US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AV	Ohkuma, T., et al., "General Asymmetric Hydrogenation of Hetero-aromatic Ketones," <u>Organic Letters</u> , 2(12)1749-1751 (2000).	
	AW	Ohkuma, T., et al., "Practical Enantioselective Hydrogenation of Aromatic Ketones," <u>J. Am. Chem. Soc.</u> 117:2675-2676 (1995).	
	AX	Ohkuma, T., et al., "Preferential Hydrogenation of Aldehydes and Ketones," <u>J. Am. Chem. Soc.</u> , 117:10417-10418 (1995).	
	AY	Ohkuma, T., et al., "Stereoselective Hydrogenation of Simple Ketones Catalyzed by Ruthenium (II) Complexes," <u>J. Org. Chem.</u> , 61:4872-4873 (1996).	
	AZ	Püntener, K., et al., "New Efficient Catalysts for Enantioselective Transfer Hydrogenations," <u>Tetrahedron Letters</u> , 37(45):8165-8168 (1996).	
	BA	R. A. Sánchez-Delgado, et al., "Chemistry and Catalytic Properties of Ruthenium and Osmium Complexes. 3. Development of Highly Active Systems for the Homogeneous Hydrogenation of Aldehydes and Ketones," <u>Inorg. Chem.</u> , 25:1106-1111 (1986).	
	BB	R.A. Sánchez-Delgado, et al., "Homogeneous Hydrogenation of Ketones to Alcohols with Ruthenium complex Catalysts," 202:427-434 (1980).	
	BC	R.A. Sánchez-Delgado, et al., "Homogeneous Hydrogenation of Aldehydes and Ketones by Use of Ruthenium Triphenylphosphine Complexes," <u>J. Mol. Catalysis</u> , 6:303-305 (1979).	
	BD	Sammakia, T., et al., "Transfer Hydrogenation with Ruthenium Complexes of Chiral (Phosphinoferrocenyl) oxazolines," <u>J. Org. Chem.</u> , 62:6104-6105 (1997).	
	BE	Sammakia, T., et al., "Transfer Hydrogenation with Ruthenium Complexes of Chiral (Phosphinoferrocenyl)oxazolines," <u>J. Org. Chem.</u> , 62:6104-6105 (1997).	
	BF	Takehara, J., et al., "Amino alcohol on the ruthenium (II)-catalysed asymmetric transfer hydrogenation of ketones in propan-2-ol," <u>Chem. Commun.</u> , 233-234 (1996).	
	BG	Yang, H., et al., "Ruthenium(II) Complexes with New Tridentate Ligands containing P, N, O Donor Atoms: Highly Efficient Catalysts for Transfer Hydrogenation of Ketones by Propan-2-ol," <u>J. Chem. Soc., Chem. Commun.</u> , 1721-1722 (1995).	

WC 9040925 v1

Examiner Signature		Date Considered	2/11/03
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

WC 9040925 v1

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **1** of **3**

Complete if Known

Application Number	10/057,826
Filing Date	January 24, 2002
First Named Inventor	Tucker, Charles E.
Group Art Unit	1621
Examiner Name	Unassigned
Attorney Docket Number	021153-001400US

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
cc	AA	4,321,414		Costa	03/23/1982	
	AB	5,716,961		Sands	02/10/1998	
	AC	5,763,688		Ikariya et al.	06/09/1998	
	AD	Pub. No.: US 2002/0016465	A1	Walinsky et al.	04/23/2001	
	AE	Pub. No.: US 2002/0016466	A1	Walinsky et al.	04/23/2001	

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
cc	AF	EP	0 901 977	A1	Noyoir et al.	03/17/1999		

Examiner
Signature

[Handwritten Signature]

Date
Considered

2/11/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

WC 9040925 v1